



DIRECTOR'S COLUMN

Henry L. Green

Registration of Mechanical Contractors by Local Units of Government

Mechanical Contractors have raised the question of registration of mechanical licenses by local communities. It is reported that local communities are charging a registration fee of \$15.00 per year even though the license is now valid for a period of three years.

The Forbes Mechanical Contractors Act, P.A. 192 of the Public Acts of 1984, as amended, states, in part:

"A contractor licensed under this act who performs work in a governmental subdivision shall register his or her license with the enforcing agency which issues permits and provides inspection services of the contractor's work. The registration shall be valid until the expiration date of the contractor's license. Registration shall be granted by all governmental subdivisions in this state to a contractor licensed under this act upon payment of a fee not to exceed \$15.00."

Act No. 119 of the Public Acts of 1997, which became effective October 10, 1997, amended the

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Probe Type Low-Water Fuel Cut Off Devices

There are several different designs of electrode, or probe type low-water fuel cut off devices. Some are internal to the boiler and others are externally installed in pots or wells. When water is present in an electrode design, an electrical circuit is made between an electrode tip and the body of the electrode. When the water level drops and the tip is no longer immersed in the water, the circuit is broken, the fuel valve shuts, and the boiler shuts down on low water. All electrode type devices operate on this basic principle. The following provides examples of possible failures and tips for trouble-shooting.

*Scale buildup on the electrode tip can occur because of the large quantity of dissolved solids in a boiler. Scale bridging of the tip can complete the circuit and may cause the electrode to sense water when it is not present.

*If the electrode uses DC current, plating of scale can occur quite rapidly. Keeping a record of inspections and cleanings is a necessity.

*Some manufacturers use a square wave DC current which is more effective than straight DC current but not as effective as AC current. Cleaning and inspection is still an important preventative maintenance item to ensure proper operation.

*Electrodes using AC current can lead to less scale buildup. In general, the higher the frequency and the lower the voltage the better the resistance to scale.

*A short circuit can give a false indication of water as well. When the water level drops the short completes the circuit and overrides the alarm. This can happen with either an electrode or a float switch.

*A defect in the switch will lead to a failure to break the circuit also. It is a good idea to have a device where the switch is normally open. A loss of power will break the circuit and keep the boiler in a safe condition. Performing regular tests to check the integrity of the switch is very important.

*The circuit should never be jumpered out because this is a safety device. Jumpering it out renders it useless. Many times those who jumper these switches out forget to remove them prior to firing the boiler.

*Damaged wiring should be replaced as it is found especially if the switch is normally closed as this may cause the boiler to continue to operate with a low water condition.

*Improper installation is a problem as well. The electrode tip must not come in contact with the boiler, the well, or the pot or a short will result.

Questions may be directed to the Boiler Division at (517) 241-9334.

Director's Column, continued:

Forbes Mechanical Contractors Act to change contractor licenses from an annual license to a triennial license period. With this change the registration of a contractor's license is based on a three year period rather than the annual renewal of licenses and registration with local communities.

Public Hearing Scheduled on Proposed Boiler and Electrical Rules

A public hearing will be held on Tuesday, June 15, 1999, at 10:00 a.m. in Conference Room 3, on the 1st floor of the bureau's Okemos office, 2501 Woodlake Circle. The purpose of the hearing is to receive comments on proposed **boiler** code rules which provide for adoption of the 1998 editions of the NBIC and ASME codes and the proposed **electrical** code rules which provide for adoption of the 1999 edition of the NEC and include amendments, additions, and deletions to the respective codes. Copies of the rules may be obtained by calling the Boiler Division at (517) 241-9334 or the Electrical Division at (517) 241-9320. Persons unable to attend the hearing may submit written comments to the bureau by June 29, 1999.

BULLETIN
BUREAU OF
CONSTRUCTION
CODES

The BULLETIN is a quarterly publication of the Bureau of Construction Codes within the Michigan Department of Consumer & Industry Services. The BULLETIN is published for the information of the 46,000 plumbers, electricians, mechanical contractors, boiler and elevator licensees, plan reviewers, building officials, and inspector registrants throughout the state.

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MICHIGAN DEPARTMENT
OF CONSUMER &
INDUSTRY SERVICES

Notice to All Providers and Instructors of Continuing Education Programs for Code Officials

The approval for all **cycle one** programs and instructors will expire on September 16, 1999. If you are uncertain as to what cycle your program(s) has been approved for, please refer to the approval letters that have been sent to you by the Bureau for each program.

If you wish to instruct courses during the 1999/2002 cycle, you are required to update your instructor approval by completing an instructor approval application, and submitting it to the Bureau with the appropriate fee.

The same is true for program approvals. If you wish to renew a program, or request approval of a new program, you will need to complete and submit an application for each program, provide the required course information, and the appropriate fee. If you need an Instructor Approval Application and/or an Education and Training Program Approval Application, you may contact the Office of Local Government and Consumer Services at (517) 241-9347.

The Bureau will be accepting program and instructor approval applications for the 1999/2002 registration cycle, beginning July 1, 1999.

Continuing Education Requirements for Electrical Licensees

All licensed electricians, fire alarm specialty technicians, and sign specialty technicians will be required to provide documentation of completion of a course regarding changes in the 1996 code, **FOR RENEWAL OF THE 2000 LICENSE**. Minimum 15 hour courses are required for electricians and fire alarm technicians. Sign specialist technicians are required to complete a minimum 8 hour course (15 hour courses will be accepted).

Numerous new courses have been added to the approval list, which was mailed last October. An updated list will be mailed to all current licensees in May.

Mechanical Contractor Examination

On November 30, 1998, the 1996 edition of the International Mechanical Code with Part 9a Amendments went into effect. With the adoption of the new code, the mechanical contractor examination was also updated to the new state mechanical code.

On Thursday, March 11, 1999, the first mechanical examination was conducted under the new code at the Royal Scott Convention Center in Lansing. The examination was given to 376 applicants who were either existing contractors upgrading their license or non-licensed applicants seeking to become mechanical contractors.

The Board of Mechanical Rules has ruled that the only material that will be allowed in the examination room is the 1996 edition of the International Mechanical Code and Part 9a Amendments.

If you need clarification or additional information about the mechanical examinations, please contact William Lycos, Assistant Chief, Mechanical Division at (517) 241-9325.

Building Code Affects Electrical Installations

Recent changes to the BOCA National Building Code/1996, which were adopted as part of the Michigan Building Code will effect electrical installations in dwelling occupancies. The changes are as follows:

1207.2 Stairway illumination:

All stairways within dwelling units shall be provided with a minimum illumination level of 10 foot-candle (107 lux) measured at every tread nosing. Exterior stairways serving a dwelling unit shall have an illumination level on tread runs of 1 footcandle.

1207.2.1 Controls: The control for activation of the required stairway lighting within a dwelling unit shall be operable from the top and bottom of each stairway without traversing any step of the stair. All switches that control interior stairway lights shall be illuminated switches. The illumination of an exterior stairway serving a dwelling unit shall be controlled from inside the dwelling unit, unless continuously illuminated or automatically activated.

Electrical inspectors are expected to review and approve all parts of an electrical installation for code compliance. Knowledge of electrical requirements that are within codes other than the electrical code is important for all persons in the electrical industry so installations can be approved without unnecessary delays.

If you have any questions, please contact the Electrical Division at (517) 241-9320.

Scheduled Board Meetings

| MEETING | DATE | TIME | LOCATION |
|---------------------------------|---------|------------|-----------------------|
| State Plumbing Board | June 1 | 10:00 a.m. | Okemos-Conf. Room 2 |
| Board of Boiler Rules | June 8 | 9:30 a.m. | Okemos-Conf. Room 2 |
| Electrical Administrative Board | June 18 | 9:30 a.m. | Okemos-Conf. Room 1 |
| Board of Mechanical Rules | June 30 | 9:00 a.m. | Okemos-Conf. Room 3 |
| Construction Code Commission | July 7 | 9:30 a.m. | Okemos-Conf. Room 3 |
| State Plumbing Board | July 7 | 10:00 a.m. | Escanaba State Office |
| Barrier Free Design Board | July 9 | 9:30 a.m. | Okemos-Conf. Room 1 |
| Elevator Safety Board | July 16 | 9:30 a.m. | Okemos-Conf. Room 3 |
| Electrical Administrative Board | Aug. 20 | 9:30 a.m. | Okemos-Conf. Room 1 |
| Board of Mechanical Rules | Aug. 25 | 9:00 a.m. | Okemos-Conf. Room 3 |
| State Plumbing Board | Aug. 31 | 10:00 a.m. | Okemos-Conf. Room 2 |

Okemos = 2501 Woodlake Circle, 2nd floor, Okemos, MI

License Exam Schedule

| EXAM | DATE | LOCATION | DEADLINE |
|---|-----------|---------------|----------|
| Plumbing Exam | July 8 | Escanaba | June 18 |
| Elevator Contractor & Certificate-of-Competency Exam | July 16 | Okemos | June 25 |
| Elevator Journeyperson Exam | July 21 | Okemos | July 1 |
| Electrical Exam | Aug. 19 | Traverse City | July 22 |
| Plumbing Exam | Sept. 1 | East Lansing | Aug. 13 |
| Boiler National Board Exam | Sept. 1/2 | Okemos | Aug. 1 |
| Boiler Installer/Repairer Exam | Sept. 1/2 | Okemos | Aug. 1 |
| Mechanical Contractor Exam | Sept. 14 | Lansing | Aug. 16 |

**Dates and locations are subject to change.*

Plumbing Examination Updates

Enforcement of the new state plumbing code March 1, 1999, requires the plumbing licensing examinations be updated.

The plumbing division will continue its policy of providing ample time for all prospective exam applicants and training instructors to make the code change. That time frame has been two examinations. Accordingly, the September 1, 1999, journey and master examination will use the 1997 International Plumbing Code (IPC) and Part 7 Rules. The division will provide the 1997 IPC, Rules, and appropriate laws at the examination site.

On December 17, 1993, the State Plumbing Board implemented its new journey practical plumbing examination. That examination consisted of a full wiped solder joint, either straight or branch, decided the day of the exam by the board, a copper project, and the written exam. The copper project consists of a header system with one offset and two risers constructed from 3/4" and 1/2" copper pipe with two threaded joints. The assembly is constructed from material and specifications provided the day of the examination. The project must hold a pressure test and fit a templet designed to measure the alignment and correct dimensions.

The journey examination updates have been very successful in measuring applicants expertise. The board has directed staff to continue its effort in improving the master and journey examinations. It is anticipated that the changes will be directed towards updating the chart and practical exams to test booklets using diagrams with accompanying questions.

Any comments or suggestions you have are welcome and should be directed to the Plumbing Division at (517) 241-9330.

Basement Stairs in Premanufactured Units

The 1996 edition of the BOCA National Building Code revised the maximum riser height to 7 3/4 inches and the minimum tread depth to 10 inches in occupancies of Use Groups R-3 and R-4, and within dwelling units of Use Group R-2. The Michigan Building Code, adopting the 1996 edition of the BOCA National Building Code became effective on November 30, 1998. The Part 4 Building Code Rules maintain the previous stairway tread and riser dimensions of 8 1/4 inches maximum riser height and 9 inches minimum tread depth, in occupancies of Use Groups R-3 and R-4, and within dwelling units of Use Group R-2.

These differences between the national model codes and the state code have led to some confusion relating to basement stairs for state premanufactured units. In accordance with sections 2, 8, and 19 of the Michigan State Construction Code, Act 230 of 1972, as amended, and the Part 11 Premanufactured Unit General Rules, if the basement stairway is included in the building system, and approved by the Construction Code Commission, the basement stairway may be constructed to the state code and shipped as part of the approved building system, regardless of the code adopted by the local enforcing agency.

Holiday Closings

State offices will be closed in observance of the following holidays:

May 31, 1999--Memorial Day

July 5, 1999--Independence Day

Authorized Signatures for Elevator Permits

Just a reminder to all licensed elevator contractors, as of March 15, 1999, the only person authorized to sign elevator permits is the supervising employee or his/her designated representative. To become a designated representative the supervising employee must submit a signed letter to the Elevator Safety Division with the printed name and signature of the designated representative. Names and signatures must be on file with the Elevator Safety Division before permits will be issued.

Also, elevator permits must be filled out completely and shall reflect what is on the shop drawing. All permits shall have their own set of final shop drawings sent in with them.

Questions concerning this issue should be directed to Bob Schumacher, Assistant Chief, Elevator Safety Division at (517) 241-9337.

Michigan Uniform Energy Code

The new Michigan Uniform Energy Code became effective March 31, 1999. A copy of the code was mailed to the clerk of each unit of government as well as registered building inspectors and building officials. Additional copies may be purchased by sending a written request along with a check for \$2.50 payable to the State of Michigan. Please mail requests to the Bureau of Construction Codes, P.O. Box 30255, Lansing, Michigan 48909.

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